PCM-3353 A2 PC/104+ SBC w/AMD LX800/LX600, VGA, LCD, LAN, USB 2.0 and CF
Startup Manual

Packing List

Before you begin installing your card, please make sure that the following items have been shipped:

1. 1 x PCM-3353 SBC
2. 1 x Power cable (p/n:1700003491)
3. 1 x COM cable **(p/n:1703040157)**
4. 1 x Audio cable (p/n:1700000918)
5. 1 x Four COM cable (p/n:1701400181)
6. 1 x Keyboard/Mouse cable (p/n:1703060053)
7. 1 x Y cable (for KB/MS extention) (p/n:1700060202)
8. 1 x Ethernet RJ-45 Conn. conversion cable **(p/n:1701100202)**
9. 1 x LPT port cable (p/n:1700260250)
10. 1 x IDE cable (p/n:1701440350)
11. 1 x VGA cable (p/n:1700000898)
12. 2 x USB cable (bracket type with two USB ports) (p/n:1703100121)
13. 1 x Startup manual
14. 1 x CD-ROM (Manual, Driver, Utility)

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Note 1: For detailed contents of PCM-3353, please refer to information on the enclosed CD-ROM (in PDF format).

Note 2: Acrobat Reader is required to view any PDF file.Acrobat Reader can be downloaded at: www.adobe.com/Products/acrobat/readstep2.html (Acrobat is a trademark of Adobe)

For more information on this and other Advantech products, please visit our website at:

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This manual is for the PCM-3353 Series Rev. A2

Part No. 2006335302 3rd Edition,
Print in China August 2010

Specifications

Standard SBC Functions

- **CPU:** AMD Geode® LX800/LX600 processor, up to 500 MHz
- **System memory:** 1 x 200 pin SODIMM socket, support Double Data Rate SDRAM, accepts 128MB to 1GB, accepts 128/256/512/1024MB DDR333 SDRAM
- **2nd cache memory:** 128 KB on the processor
- **System chipset:** AMD Geode LX800/LX600
- **BIOS:** Award 4Mbit Flash BIOS
- **Watchdog timer:** 255 levels timer interval
- **Expansion Interface:** PC/104+
- **Battery:** Lithium 3 V / 196 mAH
- **Enhanced IDE interface:** One channels supports up to two EIDE devices. BIOS auto-detect, PIO Mode 3 or Mode 4, supports UDMA 33 mode
- **Serial ports:** Four serial RS-232 ports in one pinheader 40 pin connector (CN30: COM1/2/3/4). RS-422 and RS-485 in one pinheader and can be configured via CN39 connector
- **Parallel port:** One parallel port, supports SPP/EPP/ECP mode
- **Keyboard/mouse connector:** Supports one standard PC/AT keyboard and a PS/2 mouse
- **Audio:** Supports AC97 Audio stereo sound
- **USB:** Four USB 2.0 compliant universal serial bus ports
- **GPIO:** 8 bit general purpose Input/Output

VGA/LVDS Interface

- **Memory size:** Optimized Shared Memory Architecture, supports up to 64MB frame buffer using system memory
- **Resolution:**
  - CRT resolution: up to 1600 x 1200 x 16 bpp at 100 Hz and up to 1024 x 768 x 32 bpp at 60 Hz for TFT LCD
  - LCD Interface: Supports up to 24-bit TFT LCD (TTL signal)
  - LVDS Interface: Supports 18 bit LVDS interface (support 24-bit JEIDA LVDS)
- **Dual simultaneous display:** CRT+LCD, CRT+LVDS

Ethernet Interface

- **Chipset supports:** 1/10/100 Mbps - Intel 82541PI
- **Ethernet interface:** IEEE 802.3u (100 BASE-T)
- **Connector:** One internal box headers

Audio Function

- **Audio controller:** Realtek ALC203 chipset, supports AC97 3D Audio stereo sound
- **Audio interface:** Microphone in, Line in, Line out

Specifications

Mechanical and Enviromental

- **Dimensions (L x W):** 96 x 115 mm (3.77"x 4.05") Mechanical Drawing (dxf file) is available.
- **Power Supply Type:** AT
- **Power Requirement:** +5 V ± 5%, +12 V ± 5% (Optional), (5 V only, 12 V optional for PC104 add on card & LCD inverter)
- **Power Consumption:** (Geode LX800, 256 MB DDR333) Max: +5 V@ 1.51A, +12 V@ 0.1 A Typical: +5 V@ 1.35 A, +12 V@ 0.1 A
- **Operating temperature:** 0 ~ 60° C (32 ~ 140° F)
- **Weight:** 0.85 kg (reference weight of total package)

Jumpers and Connectors

The board has a number of jumpers that allow you to configure your system to suit your application. The table below lists the function of each of the jumpers an connectors.

Jumpers and connectors

Jumpers	
Label	**Function**
J3	Clear CMOS
J5	PCI VI/O Power Selector
J6	LVDS Power Selector
CN39	COM2 Setting
SW1	CF Master/Slave Selector

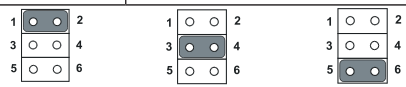
Connectors	
Label	**Function**
CN4	TFT LCD I/F
CN5	Inverter Power
CN6	SMBus
CN11	IDE
CN15	USB1/2 / CN17 USB 3/4
CN18	KB/MS
CN19	Print Port
CN20	RS422/485
CN23	SA -5 V & -12 V Input
CN26	LAN
CN27	CRT
CN30	COM1/2/3/4
CN32	AT Power / Reset / Buzzer pin header
CN33	Battery connector

Jumpers and Connectors

CN35	AUDIO-OUT / CN34 AUDIO-IN
CN36	GPIO1
CN37	GPIO2
CN38	Power Input
CN40	DDR RAM Socket
CN41	CF Socket
CN42	LVDS LCD I/F
CN43	Inverter power (LVDS)

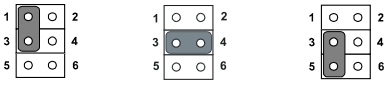
J3	**Clear CMOS**
Setting	Function
(1-2) *	BAT (default)
(2-3)	Clear CMOS

CN39	**COM2 Setting**
Setting	Function
(1-2) *	RS232
(3-4)	RS485
(5-6)	RS422



J5	**PCI VI/O POWER**
Setting	Function
(1-2)	With +5 V
(2-3) *	With +3.3 V

J6	**LVDS Power Selector**
Part Number	**1653003260**
Footprint	HD_3x2P_79
Description	PIN HEADER 3*2P 180D(M) 2.0mm SMD SQUARE PIN
(1-3) *	+3.3 V
(3-4)	+12 V
(3-5)	+5 V



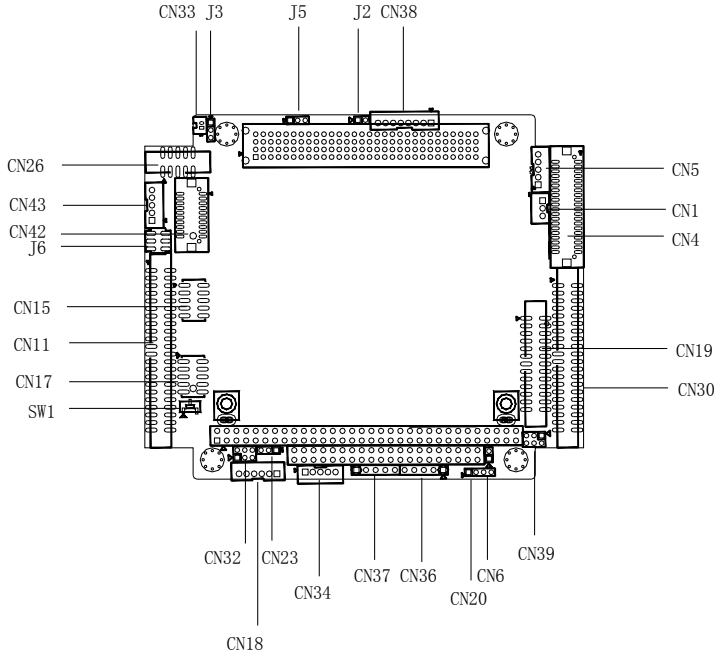


Figure 1: PCM-3353 Mechanical Drawing (Component Side)

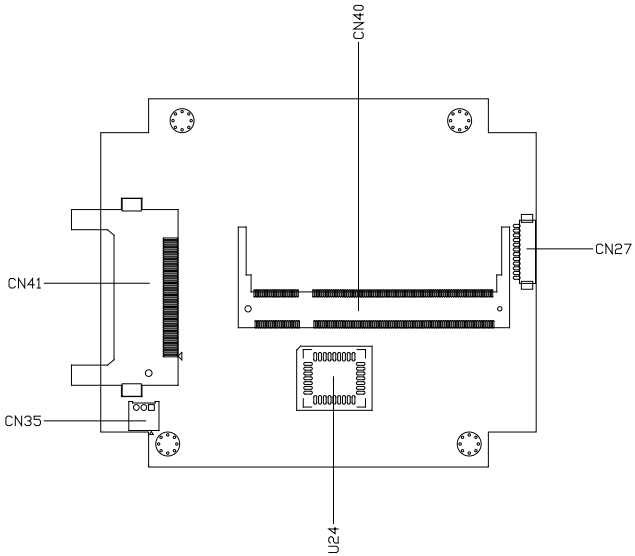


Figure 2: PCM-3353 Location Connectors (Solder Side)

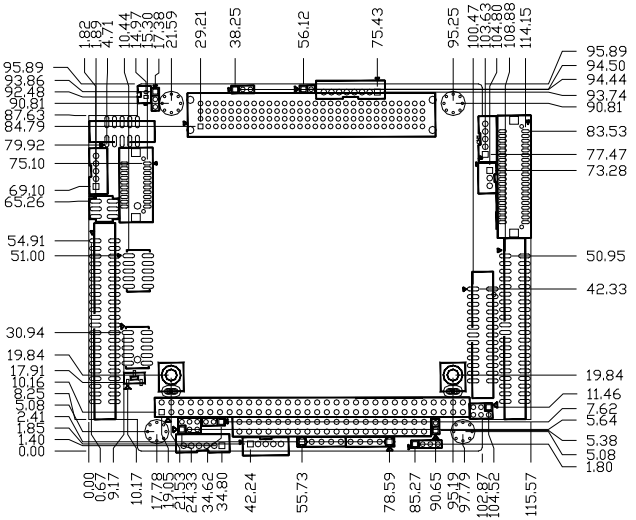


Figure 3: PCM-3353 Mechnanical Drawing (Component Side)

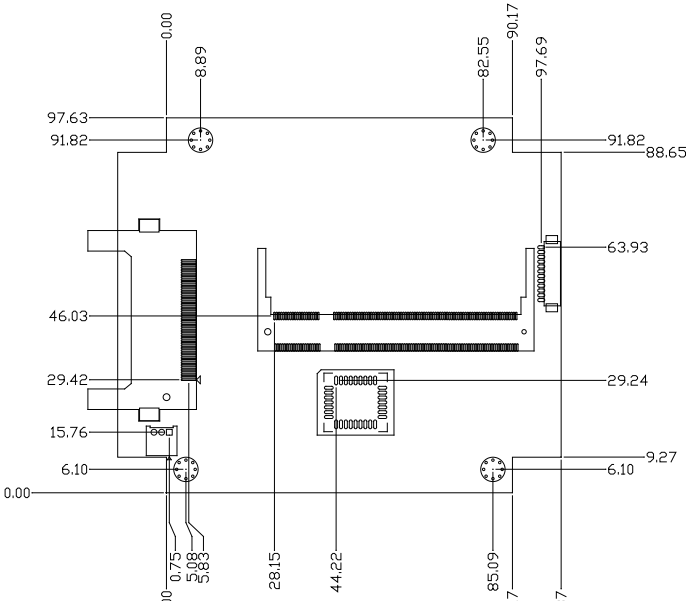


Figure 3: PCM-3353 Mechnanical Drawing (Solder Side)